

**Amendments to the claims:**

The listing of claims will replace all prior versions of the claims in the application

1.-14. (Canceled)

15.-16. (Canceled).

17. (Currently amended) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air separation unit for production of an oxygen-rich fraction for supply to processes that require oxygen and a nitrogen-rich fraction for injection;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation unit into a synthesis gas comprising mainly H<sub>2</sub>, CO, CO<sub>2</sub> and small amounts of methane in addition to any inert gas;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir;

means for transferring nitrogen from the air separation unit to the means for injecting gas;  
**and**

means for transferring at least a part of a waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas.

18. (Canceled).

19. (Currently amended) The plant according to claim 17 ~~18~~, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

20. (Previously presented) The plant according to claim 17, wherein the synthesis unit comprises one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons.

21. (Currently amended) The plant according to claim 19 ~~18~~, wherein the synthesis unit comprises one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons.

22. (Canceled).

23. (Previously presented) The plant according to claim 20, further comprising means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H<sub>2</sub>/CO ratio to a desired level.

24 -25. (Canceled).

26. (Currently amended) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air compression unit for production of compressed air for supply to processes that require air;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation compression unit into a synthesis gas comprising mainly N<sub>2</sub>, H<sub>2</sub>, CO, CO<sub>2</sub> and small amounts of methane;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir; ~~and~~

means for transferring nitrogen from the air separation unit to the means for injecting gas;

means for transferring at least a part of the nitrogen-rich waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas.

27. (Canceled)

28. (Previously presented) The plant according to claim 26, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

29. (Previously presented) The plant according to claim 26, wherein the synthesis unit comprises one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons.

30. (Canceled).

31. (Previously presented) The plant according to claim 28, wherein the synthesis unit comprises one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons.

32. (Previously presented) The plant according to claim 29, further comprising a means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H<sub>2</sub>/CO ratio to a desired level.